

This is a journal

Wharfedale Land to
Kotzebue Sound

August 12 to September
7th 1881

S. W. Mearns

OK

~~W. H. H. H.~~

Ed Nelson

"Siberia in Europe"
(valley of the Palchova)
Henry Seeborn
Scindner & Wilford

Not Aug. 12.

As we were leaving Wrangel Land I saw two small seals come up a number of times close alongside the vessel. Both were smaller than or at most not larger than the smallest species of nerpa at St. Michael's - their heads appeared entirely of a dusky chestnut color joined in a well defined line of demarcation by the silvery gray of the neck. The chestnut reached to the base of skull. Capt. Hooper tells me that he saw others of this same seal last year when cruising along the ice in this vicinity.

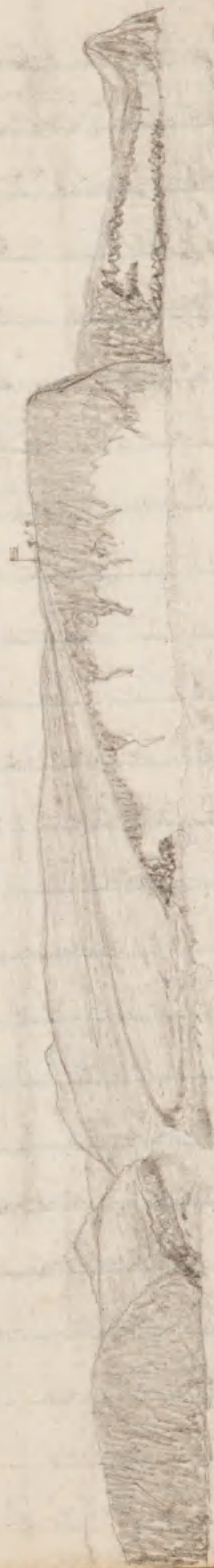
Landing on Wrangel Land

August 12

In the early morning the fog lifted a trifle and we stood back into the ice for the shore. We found the ice had opened still nearer toward shore so that we only had about a couple of miles to steam through. The bare hills began to show faintly through the lifting fog & the jagged faces of the cliffs stood out distinctly as we began pushing our way among the loose ice and right before us a small river could be seen flowing down a small cut between the rounded hills & emptying into the ~~ice~~ sea. As we thumped & crowded our way in through the ice many a grilling note & a few rattles were seen but no other signs of life. The ice became so dense & near shore that the propeller began grinding &

Pumping until several times
 the engine was stopped. This
 with the weak state of the rudder
 fastenings made us apprehensive
 of an accident for as we neared
 shore we found here there a
 grounded cake of ice in 8 to 9 1/2
 fathoms of water while the rest
 of the pack of lighter but still very
 heavy ice was running 1 1/4
 miles per hour to the north along
 the coast and should we by
 chance be disabled we would
 be snuff off into the midst of
 that vast unknown icy space
 to the N - where in all probability
 the Jeannette has met her
 fate. As it was however we
 were fortunate in reaching a
 small open space of water
 at the mouth of the small
 river whose current keeps
 the ice off shore a few rods
 here & dropping the anchor

Position of the mouth
 of Charles River - { 177° - 40' - 30"
 71° - 04' - 15"



Mouth of Charles River. East Coast of Wrangel Land August 12, 1881

1 = position of corvise

The Cutter was lowered & the Capt-Doctor Muir, Reynolds & myself landed upon a stretch of shaly drift made up of crumbling black slate upon which in the $\frac{1}{4}$ mile of this track lay strewn about a dozen drift logs varying from six inches to one over a foot in diameter at base (the latter a spruce) not a trace of former presence of man was to be found but to our surprise there lay strewn among the other drift wood the following articles showing man's handiwork—
Stump of tree which had been cut with an ax—a small spar like a small boat's mast—a piece of board such as pilot or rad box or made of—two pieces of wood from some vessel both showing bolt holes—and a double bladed paddle of

native make & the pattern of the jaw in use at Cape Wankarem and neighboring part of the Sitkan Coast—All these articles showed from their position that they were undoubtedly mere drift. The river emptied by two mouths and stranded on the small gravelly islet & between these lay the skeleton of a ^{right} whale. To each side of river landing the shore rose rapidly into cliffs of crumbling slate & rock curved & contorted in ~~strange~~ narrow strata showing different shades of dark ~~the~~ strata with a few light ones on the left making the strange curves & angles more striking than elsewhere. The country away from the shore rose in evenly rounded swelling hills becoming higher in the interior where however the hateful fog closed

its unwelcome folds before
us but lifted ~~now & then~~ ^{once or twice enough} to
give a momentary glimpse
at the bases of some much
higher mts. than any visible
along the monotonously regular
hills forming the part of the
coast. Unfortunately however
the fog hung faithfully over the
tops and refused to give more
satisfactory glimpses at these
mts. which form 3 high peaks
visible far off shore on a clear
day. Capt. H. calls these mts.
Muir Mts.

The summits of the hills were
very smoothly outlined & as
we could see by the faces
of the cliffs along shore the
strata had been shaved off
regardless of the angle they
took to the plane of the surface
showing marks of the overlying
glacial action.

As we came to anchor about 5
ships length off shore a couple
of ~~pairs~~ of Eiders (female)
with a half grown brood
rock swam gently away along
the shore beyond the mouth
of the river (some V-nigræ) and on
landing the pleasant chatter
of a couple of ~~great~~ families
of Snow Buntings greeted us
as these noisy little fellows
fluttered up from the tops of
the brack among the drift wood
and took refuge some on
the great snow bank half
covering the face of the cliff to
the right while others scattered
about in the vicinity over the
hillsides & along the stream.
The crumbling slate cliffs with
ramifying veins of white
quartz straggling irregularly
across their faces with the narrow
snow blocked track at their bases

offered no inducement for any
one to linger there so we
leaped ashore Mrs. Reynolds
with the American flag and
started for the gently sloping
hillside. As we reached the beach
the crew of the "Corwin"
crowding the fore-castle gave
us 3 times 3 rousing cheers
backed by the "Corwin's" whistle
to which we replied with
equal spirit. Then we scattered
about this way & that on the
hills which we found very wet
& muddy from recent rains
and also very sterile as the
shaling slate covered the
surface with fine soft fragments
in spite of which however
a sparse scattered vegetation
dotting the ground here & there
with green leaves gave a little
relief to a stretch of barren
desolation whose cold fog

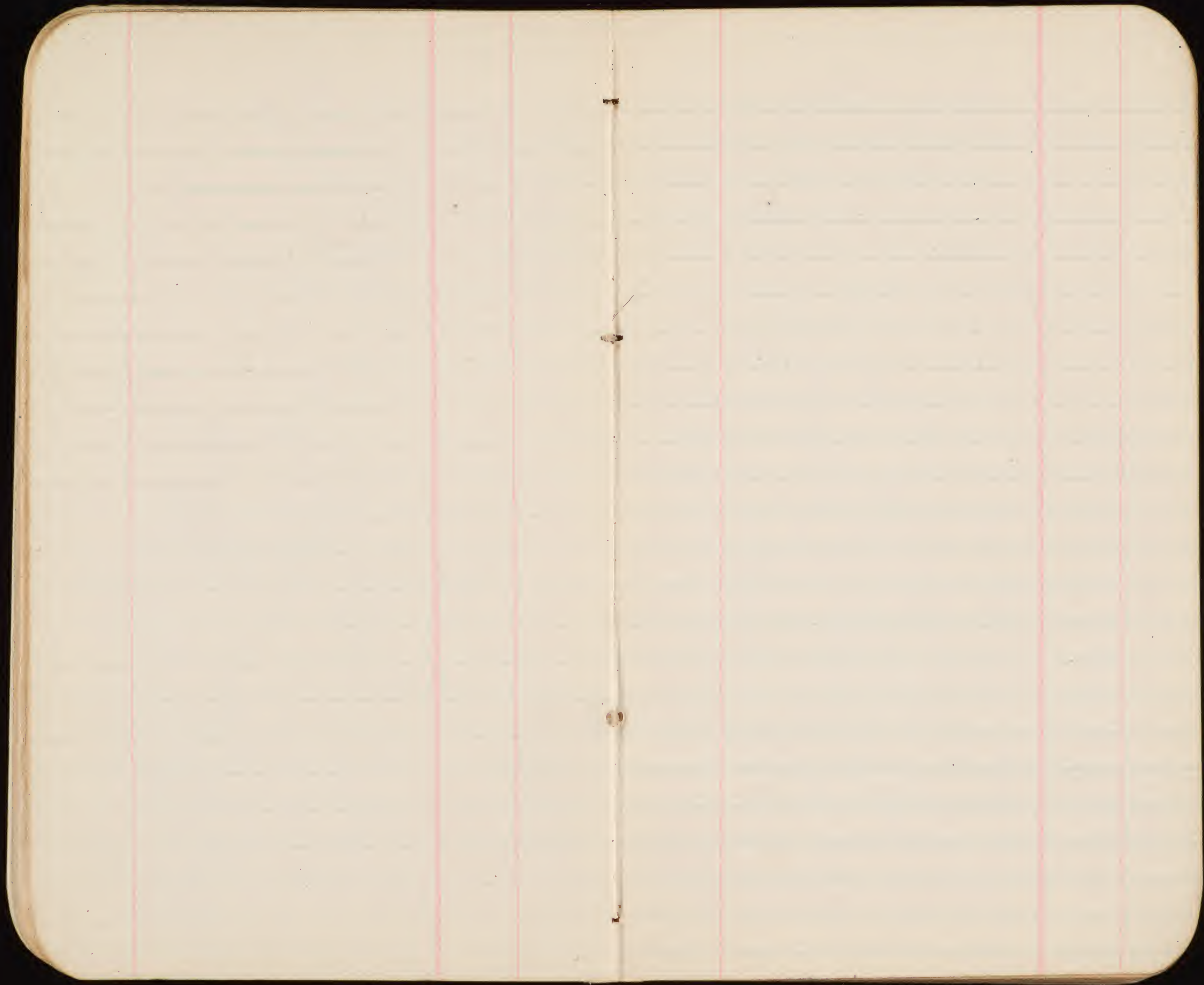
obscured shores appeared to
repel any attempt to invade
their silent ~~depths~~ and
unknown wilds. Walking
alone over the ground where
every plant was a dwarf of
its species and where for every
one or two plants there seemed to
exist a foot or more of crumbling
slate & mud the utter
desolation of the country without
a sign of animal life seemed
to strike into ones mind with
a chill feeling impossible to
describe. A few yards farther
I reached the top of a small
rise & was much pleased to
see a Snowy Owl rise & fly
hurriedly away though I
was fully 200 yds distant
from it a little later I
found some Humming holes
in dry spots and near
the banks of the river in two

places I found numerous droppings from wild geese showing that they visit this desolate place though probably simply in passing on their way further to the north to the low land beyond the Cape just north of here. Just before we came to anchor this morning I saw a Red-throated Loon pass overhead winging its way toward this same low land the presence of which was also shown by the several flocks of black-headed Turnstones which were so common in the ice as we came in this bay. On top of the hill a Golden Plover was seen also numerous burrows of Lemmings or a closely allied Marmot and the tracks of White Foxes were seen to be numerous by all - and to close the list

of animals noted I may mention a strange little shrike which one of the sailors found dead upon the hillside & brought home (N.B. this latter is in alcohol.) On the top of the hill to the right as shown in sketch a post or staff was erected with a flag or a bottle containing a record was hung to it - The best guide to this place is the remarkably shaped hills which form Cape Corwin - which are about 5 to 6 miles to the right of Corwin Clark River, and are shown in the sketch on the following page. Taken about 6 to 7 miles off shore to the east. By S.E. - Everything showed black & dismal about in the rapid passage along

10 miles N.W. of Clarksville
N.E. corner of Morgan's land August-12-1881





Aug. 13th

Kept to the eastward all day along the pack which lay in an unbroken line to the north so that it was hopeless to try and get near Herald Island for some time - A heavy sea with high Easterly wind all day increasing in the evening until the furniture &c in the cabin began sliding and thumping about. Thick & foggy showers all day.

Aug. 14th

Steaming for Cape Lisburne all day - Warm showers from the N.E. all day, the temperature moderating greatly and rising to over 50° in the P.M. and the

water at surface to
in the evening we
sighted Cape L. 10 to 20
miles to the southward
so the current setting
northward along shore
has put us out of
our course thus far.
The sea rolling too
heavily to think of stopping
at the Coal mine the
Capt. headed us towards Jay
Cape where we hope to
have news from the "Webster"
which was ~~lost~~ in the
ice at last accounts.

Aug. 15th Jay Cape
Steamed slowly up the
coast all day and in
the evening spoke three
whales off a little to the
S. of Jay Cape. The
reaction was very

great and these vessels were
in sight this morning though
at 8 a.m. & though we kept
on at 6 knots per hour yet
it was only until 4 P.M. that
we reached the first one &
5 P.M. when we spoke the
two others (4 other vessels
were also seen far off shore)
and learned that the
"Webster" was crushed in
the ice July 3rd and the
crew all got on shore at
Point Barrow and
part of them had got down
the coast & were on
the vessel we spoke last
viz. "John Howland" (New Bedford
Bldg.) The Capt. returned
on board from her & sent
back for the 1st mate of the
wrecked vessel who was
then & who soon after came
on board and gave us the

following history of the
loss of the vessel.

On the 20th of July at 11 am they
were closed in by the pack after
steaming the preceding day
trying to get around against a
S.W. wind. Their bow was headed
on toward Point Barrow to the
E. where the native village
was in plain view. The natives
came on board the evening
before from this place.

At 12:30 PM the ice pack closed
in against her immovable
thick ice, a "flaw" of the ice
+ her sides so crushed in
below the water line that in
30 minutes the water was up
within two ft. of the deck.
Every one was put to throwing
provisions, clothing + other
necessaries upon the ice
while as fast as this was done the
skins on the ice which had been

on board + who came off with sleds
began carrying everything away.
Canned meats, pilot bread, salt
meat and even the chronometers
charts + sextant were carried off.
The boats were placed on the
ice and with a few things they
had saved from the natives
the crew started ashore for the
village soon after. The vessel
was held over on her beam
ends - thus held by the ice was
carried slowly off to the north
by the drifting ice which
had closed in to a solid ~~flat~~
pack by this time as far as
could be seen.

The moment the vessel
became crushed the natives
climbed aloft like monkeys
and cut away all the sails
which were dragged upon the
ice they also stole the boat sails
from the boats after the latter were

put upon the ice - The
Capt. & party got their clothes
chests upon the ice and were
trying to get them ashore when
a couple of natives offered
to help & took the clothes over.
Before long two men lay
behind and were missed in
a short time - The next
morning the chests were found
on the beach filled with contents
and later natives were seen
with the clothes but refused to
return anything. The chests
& boxes of the vessel were
torn up & scattered about
among the natives who latter
refused to give anything back.
The natives were seen taking
the canned meats & pilot bread
which had been taken from the ice
and when they were asked
for some by the men who found
them said they would send some.

for tobacco. The party got enough
seal & walrus meat to last upon
however and remained at Pt.
Barrow for twelve days and then
went down the coast
hiring a boat with four
men & went to Angoon
the point where they stopped at
Angoon and a boat took
the party leaving here
walking down the coast
led by the Capt. & party
to go to reach Pt. Belcher
they suffered from lack
of food on the way and were
reduced to boiling & eating grass
while the Capt. & party going ahead
were ~~able to~~ go on days with
but two dogs between them.
The Capt. (Clifford) & party reached
Pt. Belcher where they remained
some time until finally the ice
opened off shore sufficiently so that
the natives started down the coast

umiaks to go to their summer
meeting grounds and in four
days from this start and on the 30th
of July they reached the whaler
"Coral". The crew ~~was~~ picked
up in small parties along the
coast from Pt. Belcher up to Pt. Barrow
between this date and August 15th
when the whaler first reached the
point as we learned afterwards.
After questioning the mate we
started up the coast in the eve,
with beautifully calm mild
weather and followed the coast
along as close as the soundings
would permit in order to take off
any people who might be left.
The mate of the whaler told us that
she was drifted off her anchor beam
in the ice & disappeared to the
north the day after she was
crushed.

Aug. 16th Point Barrow.
Arose in the morning to find us
standing along shore on the coast
with numerous fragments of
drift ice here & there along shore
with many large fragments
aground in from 2 to 6 fathoms.
We kept along all the am-
speaking several parties
of natives who came off in
umiaks from some of the
many small summer settlements
scattered all along from
Icy Cape north to Pt. Barrow.
Each village numbers from 2
to 16 conical lodges commonly
covered with pieces of sails
taken from the numerous wrecks
which have taken place
in the vicinity of the stretch
of coast along Point Belcher.
Called by the whaler the
"graveyard" so many vessels

have left their boats here
early in the am. we passed
the Sea Horse Islands and
just before noon a dense fog
shut down upon us when
only two or three hours run
separated us from Pt. Barrow.
We had to lay to and anchor for
the numerous fragments of
ground ice made it dangerous
to proceed. During the next 3
hours the fog raised & settled
several times and kept us
in a tantalized condition
and at last after we had a
glimpse of the settlement
at Cape Smyth a party of
natives came off & we learned
that the last of the wrecked party
was taken on board the
whaler yesterday. We got
on a little farther and the
fog shut down again so
thick that after running

about 4 miles we had to
blow the whistle & without
attracting attention from the
4 or 5 whalers which the natives
told us were at anchor just
off the Spit at Pt. Barrow -
After we had given up all hope
of seeing the Point and the
Capt. had almost made up
his mind to turn back and
find his way along the coast
the fog ^{partly} lifted and some
natives came off & told
us the Point lay just ahead
and directly the air cleared
so that we saw the whalers
at anchor close to the
Village on the end of the Point.
We were much pleased &
steamed away at once and
an hour later were at
anchor off the Point close
beside the Steam Whaler
Belvedere Capt. Cronin.

The brig Legal Tender
lay close by and reported
herself just from S. F. with
mail for us - which was
brought off at once -

The cutter being cleared
away Prof. M. & I went on
shore to visit the village
while Lt. Myrick took
a set of observations for
the magnetic dip & intensity.
Landing among a lot of
rough blocks of ice grounded
near the along shore
Prof. M. & I with an interpreter
made our way across a
wide stretch of shingle lying
in successive layers
ridges. Reaching back
half the width of the spit
and which extends from
Cape Smyth to this extremity.
Four vessels lay at anchor here
and 2 could be seen a

few miles to the N. The coast
from little above Day Cape
upto Cape Smyth is elevated
from 30 to 70 ft in an almost
continuous alluvial bluff
which, sodded out on top,
stretches back to the low
marshy ground which is
everywhere in the interior.
Scattered all along the
base of this bluff we saw
~~scattered~~ pieces of drift wood
but not enough to be counted
on for fuel for a party wintering
here. From Cape Smyth the
elevated land facing the
coast to the S. descends to
an elevation of 10 to 15 ft
above summer high water
and is reduced to about
a half mile in width
all the way from Cape S. to
Pt. Barrow (a distance of about
8 miles) This narrow stretch

or spit separates the water of the ocean on the west from Elson Bay on the east and is made up entirely of pebbly shingle gradually rising in successive small ridges or benches from W. to E. for at least half the width of the spit and these mark the position of the ice and water in spring before the ice leaves shore according to the natives I questioned - Following this belt comes a narrower one sparsely covered with dwarfed vegetation and a thin sandy soil mixed with the gravel and shingle.

This ridge flat is only 3 to 5 ft above spring high water and is limited on its eastern border by the

sandy


pebbly beach of Elson Bay. The native village occupies the highest part of the spit which is its northern extremity. Pools of stagnant water were quite numerous whenever the ground offered ~~a~~ suitable places -

Very little drift wood was seen along this spit - far less than to the S. of Cape Smyth. We reached the village about 8 PM and I tried to secure a photograph of the village in the ~~of~~ obscure light. The winter houses are built of whale rib or jawbone and drift wood frames covered with earth & turf on top which is bright green - their food or meat caches are built much in the same way of the same material except that in the latter the entrance is through a kind of trap in the top while the former have

the usual tunnel entrance
standing close beside the ~~entrance~~
caches and ~~the~~ winter houses
are 4 post platforms upon which
at 6 or 8 ft elevation are piled
the nets - spears & various articles
& utensils of household & hunting
gear. Scattered irregularly
among the grassy dome
shaped caches & winter houses
and the platforms - were
conical lodges shaped & framed
like all those seen along the
coast this side of Cape Probykha
only the numerous wrecks of
vessels along here have supplied
these people with heavy canvas
covers for their tents - All
kinds of whaling gear bomb
guns, lances &c &c beside
trunks, boxes & the various
spoils from wrecked vessels
lay scattered all about
on the ground on the

platforms - Numerous umiaks
lay along the shore & several
Kajaks were seen all made
on the same model as those
at Kotzebue So - except that here
at Pt. Barrow they are much longer
while only the same width
The tools & weapons of the natives
here are very nicely made of
walrus ivory & wood neatly
combined as the samples obtained
will show -

Unfortunately it was so late when
we were on shore that most of
the people not on the vessels were asleep
so we did not secure much -
I saw a fine soapstone lamp weighing
about 3 lbs. It was about 2 ft. long
and 1 wide - and shaped & divided off as
in the sketch
below.

Among the things I found were two masks with an attached board on the back as follows. I succeeded in  buying one after some trouble the owner, saying it was for use in catching whales. We had two little wooden models of right whale 3 inches long tied together by a ~~cane~~ line a fathom long and fastened to this mask. These whale models he refused to sell saying they were for use in the Umak to catch whales. These are used by some kind of Shamaning.

The women here have remarkably mild pleasant appearing features while nearly all the men are marked by most villainously ugly faces showing the most evil looking community I have seen anywhere along the coast. Many even among the young men with lowering brows; short tight drawn upper

lip with the projecting under one and the small vicious eyes give an animal like ferocity to their features that reveals their hideous character of cold blooded ugliness - There are about 300 people living here and 20 to 25 houses. ~~I tried to~~ I made some inquiries of the natives about the game to be found here or in this vicinity and obtained the following -

Reindeer numerous especially in winter on the low hills to the South-East of the Pt. a couple or over days trip with sleds - The natives gather in boats up a small river in spring - I saw a number of dead ~~carcasses~~ bodies lying in the caches at the point - These had been killed in spring brought down and the low temperature of the Cache sunk into the perpetually frozen ground here but the flesh showed no signs of taint.

Great numbers of King Eiders
with a smaller number of
S. V-nigra nest on the tundra
about Cape Smyth - Black Brant
also nest on these tundras with
other waterfowl just how
plentiful I could not learn.
The eiders can be killed in
numbers at their flying place
when they cross the spit about
midway of its length. When they
pass daily from Elson Bay to the
sea & back - This lasts all summer
while in spring eggs & in August
moulting & young ducks & geese
may be had. In spring &
fall fish are numerous
& are not uncommon all summer.
The fish are Dog Salmon - Salmon
Trout & a species of White fish.
In spring & early summer
Walrus are very numerous
also again in fall - Seal are
also common during the

open season and are caught
through ice in winter.
Polar Bears are not uncommon in
winter. From the number of
white & red fox skins and Wolf skins
in the hands of the natives it is
evident that these animals are rather
common at no great distance.
The We got on board about
10 P.M. and were given until
tomorrow, 20th, to prepare letters
for sending down on the Sled
Tender which takes on board
a cargo of Whale-bone & oil & leaves
soon for S. F.

Aug. 17th Point Barrow
Rain and fog most of the day
Spent most of the time in preparing
our mail - A lot of natives
came on board in the afternoon
and a collection of worse looking
wretches it would be hard to
discover. They have an air

of ill concealed spite which shows in the brutal sullen way they go about with lowering brows as though ready to perform some vile treachery at a moment's notice. The whalers are afraid to offend them and are continually giving them presents which the natives rather look upon as their right and as we saw on one or two occasions it required only a slight contradiction or any denial of a demand to give their faces a hideously ugly expression though they were helpless & had to submit with as good grace as possible. Should a small party of men be set down here for a winter near these rascals they would be forced to lead a most miserable existence for not only would they lose

their property by constant pilfering or outright robbery but their lives would lie in the hands of any desperado (of which every place along the coast boasts a few) whose whim should lead him to organize a treacherous attack (See Shepard Osbornes "North-West Passage" for magnificient account of these people and I can vouch for their not having improved in any way except to have better arms since then.) The whalers have up to date kept the people here supplied with torch looking rifles & fixed ammunition and though there was no whiskey to be seen yet it is a common thing for the whole settlement to be on a grand drunken bout in summer. Winchester rifles are common

all along this coast and
At Point Hope we saw one
native with a Sharp's Rifle
while I saw several natives
at Pt. Barrow showing cartridges
for this gun & asking for more.
In fact the first request they
make when offering trade is for
cartridges which being refused they
turn to something else.

The evening shut down gloomy
& dark.

The Current runs from
a knot to one & a half around
this point at present.

Open water only extends off
10 to 15 miles to the north
and west. The Capt of a
whaler here tells of
being shut in the pack

off to the north of here a long
way and remaining fast for
a month. A large part
of which time he was

19 passed at Belcher
20 " C. L. Lumsden Hope
21 to Straits

lying alongside a great floe
of level ice cracking off
as fast as he could see to the
north from the main head -
He remained here for days
so motionless that the drift
lead was not stirred from
its original position on
the bottom. Afterwards the
pack opened out & he with
another vessel near by
managed to escape.

August 18 - Left Pt. Barrow
Early in the morning a hunter or
whaling Captain came on board
before we were up and invaded
the cabin ^{being} anxious to leave
to get a little farther on along
the N. shore and they came
to say goodby and leave some
letters on board. They expressed
much pleasure at the prospect
of their being a signal station

located here.

When we were steaming all along shore ~~and by the way~~ up from Point Belcher ~~Red & Black-throated Loons~~ were common - also numerous flocks of Red Phalaropes and King Eider Ducks with a few V-nigra.

Larus glaucus & L. kochi are also quite common - A few miles north of Jay Cape I saw a pair of Knob-billed Auklets close by the vessel - These auklets are the same species so common at the Diomed Islands.

When we landed at Pt. Barrow quite a number of Bairds Sandpiper and the Black-headed Turnstones were seen about some small pools. Also a few Snow Buntings and today

The Arctic tern was quite numerous darting about uttering its shrill cries. The Pomarine Skua common all up the coast was here also and the natives brought off some Black-Grunt just moulted their wing feathers. At 2 P.M. our mail went on board the Legat tender and we steamed away down the coast just as it began blowing a stiff SW wind - which lasted until evening and with the current against us made our progress very slow.

Aug 19
Passed Point Belcher in the morning and kept along down the coast all day as the ~~wind~~ was surfy on shore was too heavy

to permit a landing at Pt. Belcher
as we had hoped.

Aug. 20th

Steaming down the coast all
day. We hoped to be able
to coal at the mine below
Cape Beaufort but the wind
blew heavily on shore with
foggy weather so the idea
had to be abandoned.

The Capt went on shore for
a short time at Cape near
Cape Sabine (to the south of)
at the mouth of a small
river to look for coal
but he found none &
was obliged to return bringing
some fossiliferous sandstone.
We then passed on and
left Cape Lisburne behind
about 5.30 PM. The rough
frowning cliffs of this old
headland stood out under

a cap of dense fog whose
ragged edges ~~frayed~~ frayed
drapery obscured the tops of
the cliffs and shed a pale
peculiar light over the
dun brown of the cliffs
whose aged wrinkles, crevices
and water worn scars
stood out strangely. Down
several narrow cut channels
ran small foaming streams
of water dashing into the
sea at base & all about
appearing & disappearing in
the fog circled the sounds of
murres & Kittiwakes.
Just at dark about 9 PM
we passed Point Hope
upon which the sea was
breaking in huge white
rollers. The wind & sea which
had been heavy ever since we
left Cape Lisburne
were still heavier here and

the Coowin wind dragging
along under sail & steam
about $8\frac{1}{2}$ knots per hour.

August 21st

Standing along all day across
the entrance to Kotzebue Sound
toward the Diomed Islands.
In the afternoon a fog shut down
of variable thickness but denser
toward evening.

We reached the Straits and
passed through late in the
evening. The fog and darkness
prevented any sight of the
shores or islands being seen.
This is a notorious place
for fogs.

Aug. 22d

A gale from the S. all night
with the current against
us. It kept us in the Straits
until this morning as the

fog shut down pitchy dark and
forced us to go under little
steam for fear of striking.
The fog & misty rain held all
day with the wind from the
same direction & rising in
the afternoon at the same time
the fog increased so much
in density that between 4 & 5
P.M. we were forced to anchor
with the kedge out.

Aug. 23d

Fog with gale from the SE. & S. all
day we steamed & sailed about
slowly all day but the
dense fog precluded the idea
of trying to get into Plover
Bay though we cannot be far
away from that place.

Aug. 24 - Plover Bay

The fog lifted in the early
morning and we steamed
ahead all day reaching

Plover Bay at 5 PM -
When the fog lifted we found
that the current had set us back
75 miles since we passed the
Strait. Capt. H. says it runs
an average of $1\frac{1}{4}$ knots per
hour with a temperature of
about 40° . The bare repelling
faces of the mountains
shut off on top by caps of fog
showed grim & dreary as we
came steaming into the harbor
and found anchored behind
the spit the schooner Golden
Fleece with Lieut. R. Ray
and his party of men on board
on their way to establish a
station at Point Barrow in
for the Signal Service -
Ray wishes to explore the
Colville & Nunatog Rivers
and if the ice is sufficiently
favorable hopes to make a
journey off to the NE. over

the ice to try and discover a
new land in that direction
This plan had already been
in my mind and I think
he will be very likely to
succeed unless the roughness
of the ice prevents.
Mr. Muddock an ornithologist
is in the party and Lt. Ray
assures me that he intends
paying attention to the native
customs and beliefs -
I presented the Lt. with my
sledge and Capt. H. gave him
a small sledge & a lot of
deer skins which will
be very useful to him.

Aug. 7th - Plover Bay -
Lt. Ray came on board
to breakfast this morning
and after a chat on his
plans and then the
Corwin took the schooner

in tow & took her
outside the heads when
her sails filled with
a light breeze - Ray
went on board and
we saluted her with
the whistle & flag & she
dipped her flag. Stood
off up the coast toward
Point Barrow. The Lt.

says the charter for this
schr. to take the party to
the point & find the whole
party of 10 men amounts
to \$4000 and his charter
and outfit to not over
\$2500.

As soon as we cast off
the schr. was returned
to our anchorage & the
crew were employed all
day coaling.

I took a turn on shore
in the afternoon but

only found some King Plover
a little sand piper and
a single Audubon's Gull
a single Raven.

All the way down the coast
from St. Lawrence Bay the three
species of Auks common on the
coast were numerous
were also the murre, Kittiwake.

Podges Fulmar
2 species of Puffin & quite a
number of mottled & Pigeon
Guillemots - I have not seen
the Mottled Guillemot before this
season and do not know where
it breeds though it must be
somewhere along this coast.

The Glaucous or Herring Gull
were rather common &
also King Eiders flying in flocks
to the south with also some
Violet Scoters. The first
Eider I ever saw passing
south was the day after we left.

An albatross (same as common in
Aleutians) was seen as we came
into the Bay the other day.

Cape Lacharme coming down
when several flocks of king
eiders were seen passing
south.

Cirg. 26 Floor Bay

Raining heavily all last night
but cleared up early this am - and
the sky remained covered with slow
moving clouds high over the tops
of the mts. A light wind barely
rippled the surface of the water
up the bay. The steam launch
was made ready and soon after
breakfast taking a couple of
natives from the spit along for
interpreters, the Capt. Doctor, Wynn
& I started up the bay to visit
a camp of Reindeer Chukchee
living there according to the
natives. The steamer rapidly
along up the bay past the mouth
of Emma Harbor where

27. High Floor Bay Foggy day
28. Stopped at Diamonds (foggy) Heater
29. passed Cape Serdy (pleasant)

Moors wintered in the Floor Bay
on up the main arm of this
deep glacier Fjord.
On every side the mountains
rise abruptly from the water in
cliffs and sharp slopes of
crumbling and jagged granite
whose summits made a
serrated line 2 to 3000 feet
above the water. The sides
of the slopes are of a dull gray
mottled with pale rusty
spots here & there with now then
a whole mt. of a pale reddish
tint everywhere the mts have
an appearance of extreme
age - deep furrows & clefts
along the sides - Sharp ridges
along which serrated lines of
spurs and pillars of weathered
granite showing a jagged line.
This combined with the
almost total lack of vegetation
which shows the red bare rock.

in harsh relief everywhere
in go-bidding prominence
gives an air of desolate
and deathlike impressiveness
to the scene which seems to
weigh down upon one's imagination
like some wild and repellant
dream-scene. The presence
of numerous water fowl in
the bay only appear to add
to the wildness of the scene
for their black forms
dancing on the ripples or
gliding by on rapid wings
with voiceless motion is all
in keeping with the rest and
one might make these the
evil spirits of this solitude
while the snow white gulls
at a distance would pass for
gentler spirits lost in this
voiceless wild upon the
stillness of which the impatient
puffing of the little steamer

broke like an ill timed interruption.
Here & there at the base of the
cliffs a small patch of
green showed where a little
soil had lodged & furnished
the plants a chance to gain a
foothold.


As we passed along many Mormon
cornucula were seen & a few
Mr. Cirrhata when we first started
Phalaris ptilacula was also
quite common & several which
I caught were found gorged to
the bill with small crustaceans
which abound here.

Mottled Guillemots were also quite
common along shore with
Pigeon Guillemots. A number
of violet green Cormorants
and Lays Glaucopt & many
Kittiwakes (*Roggen*)

After about 3 hours steaming
we approached the head of the
bay which we found closed

back in an amphitheatre
like valley a mile or two
broad by 3 long - upon the
nose-like summit of the
valley ~~opposite~~ at the head of the
bay on the steep built cliffs
and the houses & villages
by the wintering points of
the graph containing typewriters
scattered about lay glass insulators
broken bottles, old shoes &c
and small pieces of wood
wood as though the place
had been abandoned for
years or centuries. A hundred
yards farther along stood
to the oval or round topped
tents of the Reindeer people
we were in search of
who were all out looking
at our approach. It rained
and went to their tents which
were made of numerous pieces
of old worn deer skin sewed

a great piece of patchwork
of not less than 200 pieces. The
men who met us were two
tall young fellows sons of a
tall dignified middle aged man
who was the husband of one of the
women who came down to
gather of a girl of 20 years or
so old whose hair divided in a
braid on each side of face
hung fastened with strings of
beads. She possessed quite pleasant
features with a light complexion
for a native. This family occupied
the large tent while close beside
it was a very small tent in
which lived an old couple
rangers - one of the other family.
Both tents were extremely
filthy both inside & out and
the ground being covered with
garbage &c so that the whole
camp smelled very badly.
On the rear side of the lodge

by some the poles under which
lay a mass of filthy despoils
lying scattered about on the
ground inside the house were
a few wooden trough like dishes
some of which were filled with
clothing and small articles - some
deer bladder & intestines
filled with oil & deer tallow
And in one corner a filthy
flat wooden dish filled with
half decayed Salmon trout
This with various small articles
as pieces of Seal walrus skin
line, Stone marrow-bone
cracker =  a few
wooden kettles holding water
and a couple of Mountain
Sheep-horn water dippers
comprised the rest of the
house furniture - except a
Sage stone house altar & some
chips of wood at Cape
Wankarem. The housework

offered the Captain some deer
fat in a piece of intestine but
he politely declined.
Several Eskimo dogs were
wandering about outside
sniffing suspiciously at our
heels - and some of the usual
Chukchee model dog sleds
were seen standing against
the outside of the tent with
a half dozen deer sleds
made on the same model
but of much heavier material
Against several of the
sleds stood brightly polished
brass spears on shafts some
~~two~~ 6 feet long. The old man
pointed out a hole torn in
the side of the tent where a
Brown Bear came down
to make an entrance one
day when the women were
left alone and after making
a lunch upon some blubber

standing in the end he walked
back to the hill leaving
the women to recover their wits
as they could. Some piles
of money turf outside were
shown as being dried thus &
ready for firing to warm up
the house by the smoke pipe
when the men were away.
They bore a fierce and fierce
polished sword sharp as the
shards made of pine straight
wood.

We finished looking about
the hill and then asked
for the deer when the people
said they were in the net
beyond the end of the valley.
When we explained that
we desired to buy one and
wanted the best possible
one the two young men
took each his spear &
started off across the

rocky valley at a loping
trot with the springy gait
of practiced mountaineers.
The men like all the kind
many of the residents of the West
Cap. small straight nose built slender
looking men with long legs a long
neck & a very long narrow face
as compared to the Eskimo.
They all have a frank easy bearing
which they put themselves on quite
casual fastening at once with
whom they meet but our experience
with them has invariably produced
a favorable impression of their
honesty & straightforward dealing.

We waited here between 10 & 11 hours
when at last we saw the head of
deer come filing slowly through
a cleft into the head of the valley.
The two young men drove them
slowly along and (altho' the
village had been told up about
the houses when they first started for

the deer) we went down out to
meet them as the old man told
us the deer did not like to come
near the houses when the dogs
were. Passing over a mass of
broken covered knoll with
various plants filling the
interspaces forming the
densest mat of vegetation we
had seen in the vicinity
we came to a meadow like
flat through which ran
several small streams
which kept the vegetation on the
meadow bright green and
dotted with a few flowers
though the air was full of
dust. Through this pretty little
valley lying in the heart of the
sterile north came a herd of
about 200 Reindeer their
black coats glistening in the sunlight.
They rambled gently along picking
a mouthful of juicy grass

at intervals or playfully
shaking their heads at one another
once I saw one reach up with
hind feet & strike at another
with both its fore feet.
Thus they always remain
so many as of any kind
might do until they were
driven in front and then
go to places distant and
then the young of the kind
came & joined in the herd
beginning to play around
about. I got out my camera
& secured 3 plates of the herd.
They are beautiful animals
their long slender horns, and
shiny eyes and sleek coat
of rich dark brown or mottled
milky white and brown make
a picture strange & rarely
handsome. The jaws fall
the head has their horns in front
though some of them had begun to

shed it & it hung in long shreds
from their hands looking like
Spanish moss hanging from the
branches of a dead cypress—
We told the natives we wished
to buy two deer & they said
they would sell us the flesh of two
fawns but that they would not
part with the skins. I tried hard
to get them to kill an old deer
so I could get its skin for
a specimen but they refused
saying they needed the old ones
to load their sledges with all
their effects when fall came
and they have to get out from
the mountain valleys to the
tundra where there is less
snow. Each young man went
to the herd & walking up to
a fawn caught it by one
leg & separating it a little
from the herd his companion
held it with its head by the head

while he took his knife &
placing the knife point over
the heart on the left side &
fixing it with the left hand
made a quick thrust & a
second turning motion & thrust
back so that the blood gushed
into the chest cavity. The knife
was removed as soon as the
deer was laid on its ^{right} side.
The old woman then came
up & taking some blood from
about the wound between her
thumb & fingers cast it away
from the animal about the
of its four legs. She then laid
a ^{green} willow stem with leaves &
twigs under the fawn's nose and
then poured some water from
water into the side of the fawn's
mouth as it lay open. She some
more upon its temples & more
just above the knife wound.
The above were all the observances

noted and as soon as the jaws
were fairly dead the women
skinned them.

They said if they sold us the
skins of these animals that
the next moon the whole herd
would die so we had to be content
to secure the cutters by paying
extra.

The young fellows then stripped
to the waist & each shouldered
a carcass & brought it to our
boats & getting our things on
board prepared to start off.
Just as we did this the old
pensioner came up & showed
an empty knife sheath & the
Captain presented him with
a new one at which he
uttered an exclamation of
pleasure & tried to seize the
Captain's hand & smiling &
laughing at the prize he
had secured. His hands

were covered with a skin
disease (psoriasis) so his
salute was declined.

We embarked & just before
P.M. - reached the vessel.
Here & there on the route all
the way up we ~~had seen~~
saw snowbanks.

I secured a fine salmon trout
of one of the Drumsen today
which the latter killed in
the creek near his camp.
We have had some of these
to eat here today & they are
delicious, almost equalling
the King Salmon.

I shot a Rodger's Fulmar just
as we approached the ship.

I secured the following
short list of Reindeer Chukchee
words today.

White Bear Tēm Kā

Brown " Kēm gūm, Kēm gān

Mountain Sheep Kē tē pād lū

same deer Kū rāng
Hlō " il ū wē lū
Dog ăt an

11 Shē ū rū őr

12 nū rōk (a in father)

13 nū rōk

14 nū rōk

15 mūt lūg k

16 Mūn mūt lūg k

17 nū rā " "

18 Am gō rōt

19 Kōn a zēn kē

20 Mūn gē kē

Man = Kū lān

These birds with a blue or dark blue in the lower end of a feather.
A tube used for sucking up water. Whence it may occur in one cup - the piece of wood.
These birds with a blue or dark blue in the lower end of a feather.

While at Plover Bay we learned that a Russian Man-of-war was seen here & gone north also that the "Rodgers" steamer search up. Steamer left here for St. Michaels about a week ago.

Aug. 27 Left Plover Bay
Early in the morning we
steamed away from here
& made for Berings Is again
into a dense fog which
hid everything from us outside
a hundred yds radius.
Nothing of interest today.

Aug. 28 Diomed Is.
Dense fog all the P.M.
In the afternoon we stopped
at the large Diomed Is.
for a few hours as the dense
fog & heavy drifter blowing
into the straits made it
risky trying to proceed.
We went on shore & I
bought a number of ethnological
I found the natives here
living in houses half dug in
the side of the hill and formed
inside of rough hewn planks
like all the houses along the

Alaskan coast turn on
sledge & bring in. In place
of dirt the outside of the house
is protected by a rough rocky
upright wall of stones with
an arched stone covered
passage way 20 to 30 ft long
leading on a slight incline
up to the floor of the room
where are oval openings
admits one to the room
with benches on each side
3 1/2 ft from the floor.

This is the winter house. It
roof has the usual slant
and is covered with stones &
grass. A little higher and
built upon the surface of the
ground with a simple arch
entrance of stone but shorter
and the house generally
much the same only less
carefully protected from the
winter. Placed upon four

posts over the entrance to the
summer house or close by it
is erected the cache for the owners
furs, & skins. The frame work
floor of this one is of wood but
the sides & roof are made of
walrus hide stretched &
tacked on.

Some of the houses had an entrance
to the summer house through
a short stone room or tunnel
built up of wood & stone.
A little people here have just
returned from Kotzebue Sound
where they have been trading.
They have little to report but
21 things to keep
them to trade to the
Chukchees at least Cape
where they intend going
very soon now. They hope
to secure walrus hides
from the latter in exchange
for a full amount of

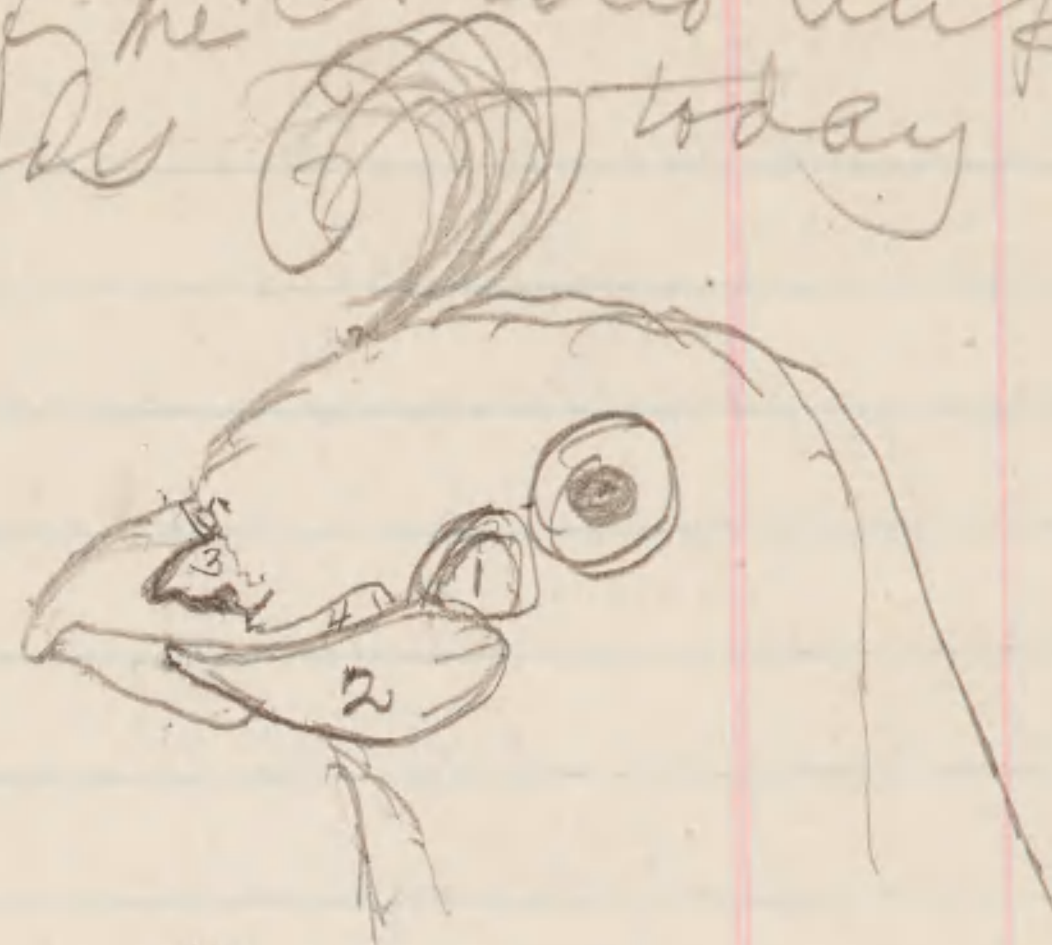
4 Ivory
bone armor among the
other things here.

I tried to get a kayak here
but found that they have
taken all their kayaks
apart & stored the skins
for the summer.

The Phalaris cristatella
is moulting its orange
colored bill ornaments
giving quite a different
expression to the birds
head - A young Albatross
like the one seen at Plover
Bay was seen just as
we anchored today.

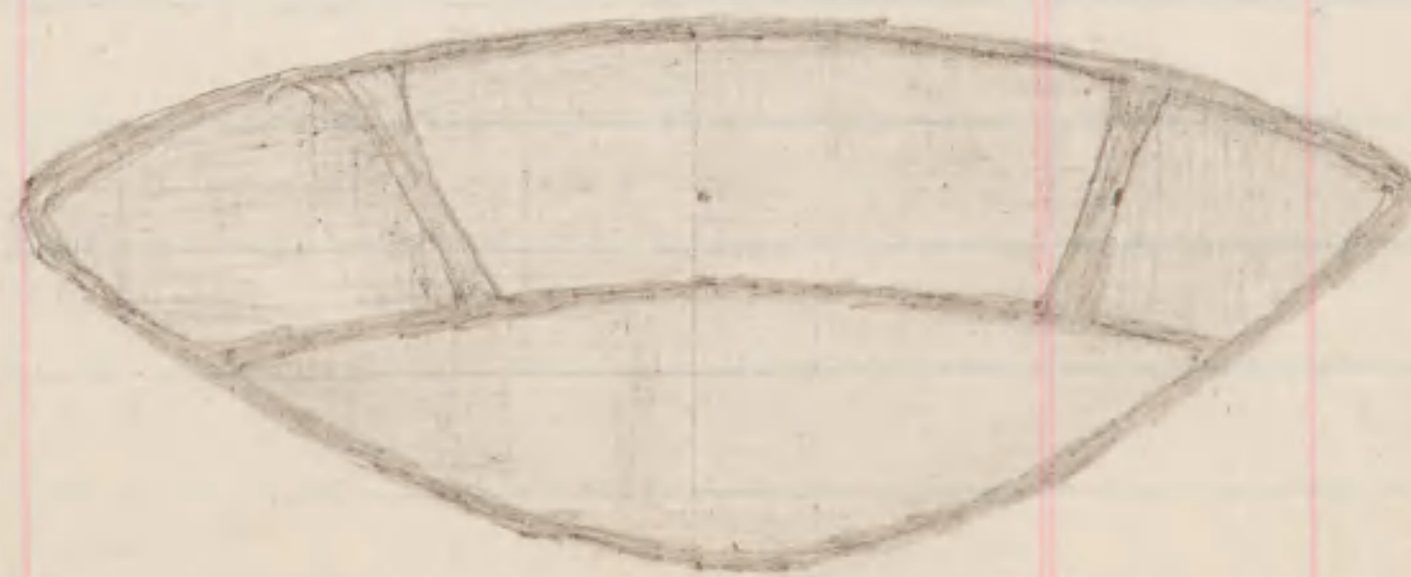
The following sketch shows
the parts in which the
bill ornaments are shed
of Phalaris -

Obtained a partly albino
specimen of the Crested Auk at
the Drummie today



- 1 = 1st piece shed
- 2 = 2nd " "
- 3 = 3rd " "
- 4 = 4th " "
- 5 = piece shed with 1 & 2 or 3 at most

The sketch below is of a soapstone lamp
seen at Point Barrow - this lamp
was 2 ft. long - 10 inches broad and
weighed about 30 lbs



Aug. 29th Past Cape Serdy
steaming on towards the SE,
Cape Wrangel Land with
a rough sea & heavy wind
from the NE. all day.
Passed Cape Serdy in the
AM - and were out of sight
of land the rest of day.
Rogge's Fulmar & the
Pomarine Jaeger very
numerous in the PM.

Aug. 30th Wrangel Ld.
Wind & sea as on yesterday
kept on our course till after
noon when land was seen
and was raised rapidly
until when we were only
about 20 miles off Wrangel Ld.
when we found the ice
forming a thin lead which
shut off in front of us &
extended far away to the S -
also to the NE - so we

backed out & stood along the edge
of the pack which this NE. wind
is pushing steadily along down
the shore. We hoped to get
in to Herald Is. around to
the north of this pack but it
is very uncertain.
No trace of new fallen snow
could be seen and but very
few snow banks were visible -
The ice is much as when we
left at this part of the Coast.

Aug. 31st Herald Is.
Early in the morning we stood
back around the ice to the
north and headed in for
Herald Is. which came in
sight in the middle of the forenoon.
The high north east wind and
heavy sea which continued
all last night increased so
much during the day that
soon after noon we were

forced to lay to about 10 miles from the island -

By eve, a heavy gale and a very heavy sea made the Corwin roll & plunge about in a very nasty manner.

September 1st

The gale & sea from the NE, continued with increased violence all day and we kept our position, not to all day for it was so rough that had we tried to go anywhere the boats on the davits would be rolled under and washed away - As it was they were frequently dipped well into the massive green seas rolling by and the decks were frequently washed by the heavy surf. (The all breaker was torn off the bows)

Mooring to the stern

Sept 2

Laid to in the still continued gale from the NNE until 2 PM when the rudder ~~stop~~^{chain} was broken by a heavy sea - As soon as this was repaired at 3 PM we got under way and started off for Kolome SS. We were continually shipping seas & in the am - took in two boats on deck to prevent their rolling into the water & being torn loose from the davits! The rudder is so weak from its being broken & poorly mended the first part of the season - Numerous snow squalls all the first two-thirds of the day - The lowering sky with the sweeping waves of a dark sullen greenish heaving the Corwin about, the decks slopped with and everything

Combined made the outlook
watchedly uncomfortable.

September 3rd -

The wind easterly and
very light all day - The old
swell still running from
the north but falling continually.
The temperature milder
than before and were it not
for the fog which kept the
Sun hidden it would be
very pleasant.

Just before eight P.M. we
let out the kedge & came to
anchor to wait for the fog
which held all day to let us
found a current of 3/4 of a
knot setting to the NW -
a number of Rodgers
fulmars and one knob-bill
were seen during the
day. We are probably lying in
the vicinity of Pt. Hope -

Sunday

September 4th

Laid to in the fog until
noon when we got under
way & steamed slowly to the SE by
E. - Some Arctic Terns
flew common gulls
glaucous & sooties were also
about about noon.
The fog kept on all day rising
& falling & shutting so dense
in the eve that we came
to anchor at 8 P.M. for the
night.

Monday

September 5th

Got under way at 5 A.M. and
kept along on our course toward
the head of Scotchman's Bay with showers
from the NW. A solitary Redpoll
Linnit strayed off in the fog
& came aboard early this
morning for a time and then
departed. On the night of the
2nd & 3rd the water was full.



Native Village on S.W. Point of St Lawrence Is.
 Copied from sketch by J. Munin Summer 1881

At this place about 100 dead not to mention victims of famine
 two years ago were found. Only about 15 survivors in
 two summer houses on the hills.

of phosphorescent globules
 flashing out & disappearing like
 fireflies and with nearly as great
 intensity - The water was sprinkled
 full of these pretty little animals
 as it was on several nights
 below the Strait on our last
 trip down there.

Aug 27 - We came to anchor
 just off Cape Krusenstern

~~Monday~~ ~~Tuesday~~
 Sept. 6 - Hotham Inlet to Chamisso³
 About 5 a.m. we got under way and
 steamed down the coast past several
 small summer ^{fishing} villages until
 off Hotham Inlet when we stopped &
 anchored - There was a fresh wind
 blowing & Capt. H. Proj. M. & I went
 on shore - We found that there
 were but some 2 to 8 tents in
 place of the 150 which were here
 when we were off this point
 earlier in the season
 Frames were up along the shore beside

Sept 8th spent day on elephant

the tents and hung full of drying fish - which latter consists of dog Salmon and the rich red flesh makes a bright patch of color at a ~~short~~ distance adding greatly to the appearance of the village. I secured photo's of the camp - which will serve better than a description. The natives were a good natured lot but had very little to sell a few tanned & wild deer skins bring all. They told me that they had bought plenty of rifle cartridges from the C. P. of Wales people who were here some time ago - There were several clay pots about the camp one of which I bought - Several about the size of a pint mug & two holding 3 or 4 gallons were seen. These latter were shaped & marked as follows -



I tried to buy ~~one~~ but there was no very good one & the owners wished to make such a job of the matter that I did not get one. The Capt. bought some ducks including Anas acuta, a Americana & a green-winged teal. The natives here set their salmon nets by pushing out a long pole with the outer end of the gill net hooked over the end and then withdrawing the pole. Near the houses their dogs were staked out & there were many fat contented looking little children toddling about. After a short time we returned on board & started for the head of Kotzebue Sound. The weather & water became very warm as we advanced and the

Wind calming down
we had a beautiful evening
the sun shining on brightly colored
clouds as it disappeared and
the clear brilliant light
of the full moon swamping
like a large molten silver
on whose face we could
see very distinctly with ordinary
glasses the ^{craters} ~~hypercraters~~. Directly
ahead lay a broad silver road
path of glittering light along
which we steamed. As the
orange and yellow faded
over the sun the stars and
planets came out one after the
other with their brilliant
diamond points dotting the
sky in solitary radiance
for the smaller stars were
rendered invisible by the
brilliance of the moon. About
9.30 P.M. we came to anchor
just off Chamisso & Puffin Is.
next Chonos Peninsula.

Chamisso Is. and
Puffin Is.
September 7th

In the morning Dr. R. R. Brown & myself took
the dingy & pulled in to Puffin
Is. which we found consists of
a rugged, precipitous mass of
(apparently) talcose schist.
The islet is perhaps 200 to 300 yds
long rather narrow & is covered
with a low but thick growth
of bright green grass wherever
any soil gave it a foothold.
The outer end composed of a
rugged pillar like mass of
rock afforded nesting sites
on its rugged sides to a large
number of Kittiwakes ^{of both}
The young were all fledged
and able to fly though many
of them stood on their narrow
shelf like perches dotting the
face of the massive pillar
like end of the island. These
young were very innocent
and the only one I could get

at in the short time I was
on the island stood & looked
curiously at me until I
caught it in my hand.
Myriads of Horned Puffins
circled around & around
the island or stood in rows
along the edges of great boulders
and rocks & gliding with
amusing gravity and only
scrambling off & taking wing
when you came within 15 or
20 feet. The island is honeycombed
in every crevice where they
have foot hold in the dirt which
fills it. The grass growing
rank in the well enriched
soil is trodden down by the birds
as though the place had been
visited for a large number of
people. Under the roots of
the grass burrows were seen
winding in everywhere &
even for moments one of the

occupants would pop out &
with a startled glance at us
scramble away & launch himself
into the air. A constant
grunting & growling issued from
these underground nurseries &
from other Puffins upon the
rocks though these latter
generally stand with a
indignant air of amazed
surprise at us. The Doctor
began climbing up the steep
side of the rocks & a Puffin
perched on a crag a few yds.
higher stretched himself
up the full length of its
legs and craned its neck
over and gave a keen
scrutiny first with one eye
and then the other as though
too surprised to utter a
sound & then he brought
out several deep grunts
as a kind of commentary on

this strange apparition.

The Doctor turned interrogative to his companion to find the cause of his strange sound. The latter repudiated the assertion and the repetition of the noise by the Puffin revealed its origin.

Not a single young one was seen - There were thousands of *Mormon Arctica* & I only saw one *Circus*. While at the cliff I saw a Puffin bring in 4 sticklebacks at a time all held crosswise in her beak. The young of *Larus Kotsuici* (the only other bird on the island) all occupied nests more or less rudely formed of pieces of moss, grass & seaweed placed like a ^{thin} saucer shaped mat on the shelves & craggy niches - I secured a fine photographic view of

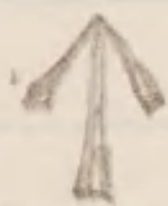
this part of the rock.

Leaving her we crossed the narrow strait to Chamisso Is. A reef connects the two Is. 3 to 4 ft under water & produces a hole in which we saw 3 *nerpas* (hair seal) which raised their heads well out of the water several times close by us and after a deliberate look sank back out of sight.

A number of Oldsquawk and *Aldenburgia perspicillata* & *Ch. americana* were seen here - We went on land on a fine white sand beach on the western end of Chamisso Is. and climbing its side we made our way back to the signal post erected on its southern side by the English & Russians marking the position of the astronomical station.

location by the former -
I secured a photograph of the
place upon the top of the
largest post which is about
15 to 18 ft. high is inscribed the
following on a space between smooth

H. B. M. S.
BLOSSOM
SEPTEMBER
1826



about the base
were inscribed
in Capitals
"H. B. M. S. Herald
1848" ↑
and Blossom,
July 1849.
These inscriptions
on the southern
face -
Also on the same
post was the
"Corwin" 1880 &
"U. S. S. Yukon" 1880
On the small
post about 6 to 8 ft.
higher was carved

The following which is translated
on the outer column -



P. A. K.

ЭКСПЕДИЦИЯ = "Potiphar"

И. Я.

1838

С 29 Авг

до Сент

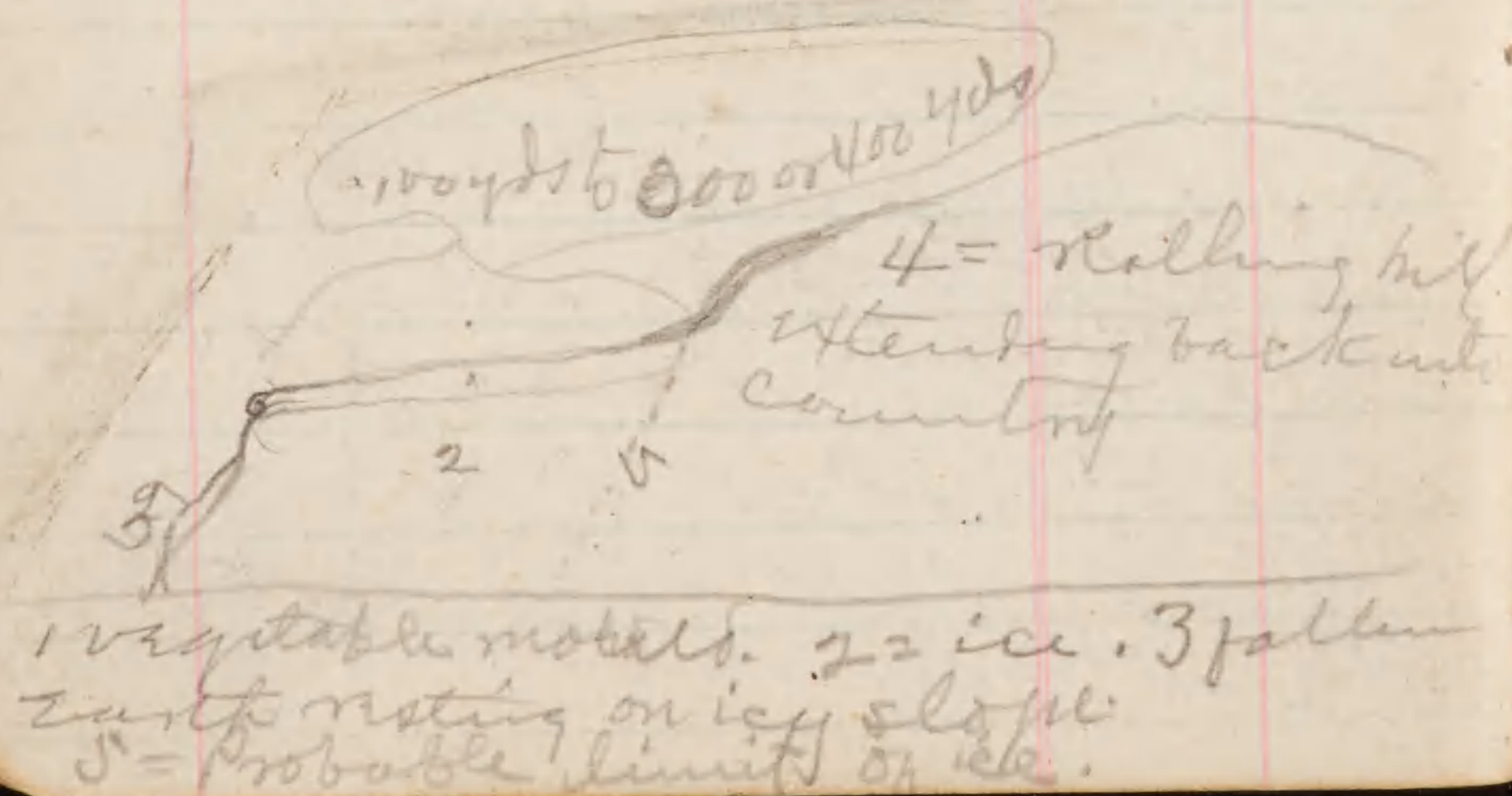
Т. С. + М. С.

Both these posts are
erected upon a jutting rock
and supported by a mass of
rocks at their base.
They are in a good state of
preservation though the
inscriptions are becoming
defaced by exposure to the
weather. All about

the base of the rocks
the ground was colored
with the gray & yellow lichens
dotted with very many
scarlet cranberries —
After photographing the points
and eating a few berries
we made our way slowly
back to the boat and went
on board the Corwin.
Then we came the anchor
or we steamed up opposite
the bluffs on Elephant Point
when the water shoaled so we
were forced to anchor in
 $2\frac{3}{4}$ fathoms. We went ashore
to the bluffs containing the
ice about which so much
has been said and after
a look along it we the
shore we returned to
the vessel. We found the
entire bluff to be 140
feet high (Aueroid Bar) and

to be made up mainly of
ice along its face for about
3 miles near. The ice has
frequently a projecting
snout under which the
water at high tide has
eaten 15 to 20 ft and this
~~slopes~~ snout slopes up &
has its upper surface
hidden by an inclined
bank of sod & sail fallen
from the brow of the hill
above. This sloping bank
is covered with a luxuriant
mass of vegetation mainly
grass 2 to 4 ft. high with
~~alder~~ ^{thoroughly} Alder bushes
at places and this sloping
bank ends abruptly against
a more or less abrupt
rising wall of ice 5 to 20
feet high forming the brow
of the cliff & over this ice
is a layer of from a foot to

300 yds. of vegetable mould & peat upland which rises a rank growth of grass. Sloping back up a gradual ascent a few hundred yds to less the surface of this rises and much a slope rising at a much greater angle and curving up to the rounded summit of the rolling hills which extend into the interior from here. The following outline gives an idea of a section of the country.



All along the shore here a peculiar smell fills the air from the mass of decaying vegetable matter exposed. Toward the eastern end of the face of the cliff on a slightly projecting point I found an old beaver house embedded in the earth with two feet of vegetable mould on top of it it was exposed in section by the crumbling of the bank and noted as in the following section -



The base of the nest rested upon an alder
7 inches in diameter at butt and
the rest of the heap was composed of
alder sticks from 1/2 an inch to 3 or
4 inches in diameter & from
6 inches to 5 or 6 ft. long. Nearly
all the smaller sticks had their
bark eaten off & many still
retain the marks of the teeth
and all show the teeth marks
at each end. The entire mass
was below the line of permanently
frozen ground here and except
for an inch or two along the
exposed surface ^{when it} was thawed
slightly. Upon each side of the
beaver nest a few yds away
about on the same level
was the ice apparently surrounding
the ~~ice~~ mass of ^{frozen} earth on which
the nest rested, on three sides
thus showing the apparent
island formation of this
mass of earth - I brought

away some of the sticks
from the nest. They were all
alder and waterlogged and
soft enough to be easily picked
to pieces with the finger nail.
~~After a short look took~~
~~along the cliffs~~
Just beyond here I shot a
Ptarmigan which dropped
75 to 100 yds away near a bunch
of Alders whence a pair of
Pyg falcons suddenly
appeared and one of them
made way with my game
before I could get within
range.

200, 10 ft. ice from 1 m. off Cape
Fruith. to the 10 ft. snow

Found everywhere except on
marginal ice - several is
Cassiope or Andromeda
4 angled vine ~~with~~ with
pale pinkish or white flowers

